

SEQUENCE LISTING

- <110> FELDER, ROBIN A. JOSE, PEDRO
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- Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu
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- Glu Cys Thr Arg Val Ala His Asn Tyr Leu Arg Gly Glu Pro Phe Glu 145 150 155 160
- Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp 165 170 175
- Leu Glu Arg Gln Pro Val Thr Lys Asn Thr Phe Arg His Tyr Arg Val 180 185 190
- Leu Gly Lys Gly Gly Phe Gly Glu Val Cys Ala Cys Gln Val Arg Ala 195 200 205
- Thr Gly Lys Met Tyr Ala Cys Lys Leu Gln Lys Lys Arg Ile Lys 210 215 220
- Lys Arg Lys Gly Glu Ala Met Ala Leu Asn Glu Lys Arg Ile Leu Glu 225 230 235 240
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- Lys Phe His Ile Tyr Asn Leu Gly Asn Pro Gly Phe Asp Glu Gln Arg 275 280 285
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- Met Ala Pro Glu Val Val Asn Asn Glu Lys Tyr Thr Phe Ser Pro Asp 355 360 365
- Trp Trp Gly Leu Gly Cys Leu Ile Tyr Glu Met Ile Gln Gly His Ser 370 375 380
- Pro Phe Lys Lys Tyr Lys Glu Lys Val Lys Trp Glu Glu Val Asp Gln 385 390 395 400
- Arg Ile Lys Asn Asp Thr Glu Glu Tyr Ser Glu Lys Phe Ser Glu Asp 405 410 415
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Cys Arg Leu Gly Leu Lys Glu Glu Asn Pro Ser Lys Lys Ala Phe Glu 100 105 110

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- Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp 130 135 140
- Leu Glu Arg Gln Pro Val Thr Lys Asn Thr Phe Arg His Tyr Arg Val 145 150 155 160
- Leu Gly Lys Gly Gly Phe Gly Glu Val Cys Ala Cys Gln Val Arg Ala 165 170 175
- Thr Gly Lys Met Tyr Ala Cys Lys Leu Gln Lys Lys Arg Ile Lys 180 185 190
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- Lys Val Gln Ser Arg Phe Val Val Ser Leu Ala Tyr Ala Tyr Glu Thr 210 215 220
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- Ala Val Phe Tyr Ala Ala Glu Leu Cys Cys Gly Leu Glu Asp Leu Gln 260 265 270
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Gln Asn Glu Met Ile Glu Ser Gly Cys Phe Lys Asp Ile Asn Lys Ser 485 490 495

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Arg Leu Phe Arg Gln Phe Cys Asp Thr Lys Pro Ile Leu Lys Arg His 65 70 75 80

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Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu 115 120 125

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- Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp 165 170 175
- Leu Glu Arg Gln Pro Val Ile Lys Asn Thr Phe Arg His Tyr Arg Val
- Leu Gly Lys Gly Gly Phe Gly Glu Val Cys Ala Cys Gln Val Arg Ala 195 200 205
- Thr Gly Lys Met Tyr Ala Cys Lys Leu Gln Lys Lys Arg Ile Lys 210 215 220
- Lys Arg Lys Gly Glu Ala Met Ala Leu Asn Glu Lys Arg Ile Leu Glu 225 230 235 240
- Lys Val Gln Ser Arg Phe Val Val Ser Leu Ala Tyr Ala Tyr Glu Thr 245 250 255
- Lys Asp Ala Leu Cys Leu Val Leu Thr Ile Met Asn Gly Gly Asp Leu 260 265 270
- Lys Phe His Ile Tyr Asn Leu Gly Asn Pro Gly Phe Asp Glu Gln Arg 275 280 285
- Ala Val Phe Tyr Ala Ala Glu Leu Cys Cys Gly Leu Glu Asp Leu Gln 290 295 300
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- Asp Asp Arg Gly His Ile Arg Ile Ser Asp Leu Gly Leu Ala Thr Glu 325 330 335
- Ile Pro Glu Gly Gln Arg Val Arg Gly Arg Val Gly Thr Val Gly Tyr 340 345 350
- Met Ala Pro Glu Val Val Asn Asn Glu Lys Tyr Thr Phe Ser Pro Asp 355 360 365
- Trp Gly Leu Gly Cys Leu Ile Tyr Glu Met Ile Gln Gly His Ser 370 375 380
- Pro Phe Lys Lys Tyr Lys Glu Lys Val Lys Trp Glu Glu Val Asp Gln 385 390 395 400
- Arg Ile Lys Asn Asp Thr Glu Glu Tyr Ser Glu Lys Phe Ser Glu Asp 405 410 415
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Leu Gly Cys Arg Gly Glu Gly Ala Ala Gly Val Lys Gln His Pro Val 435 440 445

Phe Lys Asp Ile Asn Phe Arg Arg Leu Glu Ala Asn Met Leu Glu Pro 450 455 460

Pro Phe Cys Pro Asp Pro His Ala Val Tyr Cys Lys Asp Val Leu Asp 465 470 475 480

Ile Glu Gln Phe Ser Ala Val Lys Gly Ile Tyr Leu Asp Thr Ala Asp 485 490 495

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Ile Glu Phe Leu Asp Ala Val Ala Glu Tyr Glu Val Ala Asp Asp Glu 50 55 60

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Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu 85 90 95

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Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp 130 135 140

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- Thr Gly Lys Met Tyr Ala Cys Lys Leu Gln Lys Lys Arg Ile Lys 180 185 190
- Lys Arg Lys Gly Glu Ala Met Ala Leu Asn Glu Lys Arg Ile Leu Glu
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- Lys Val Gln Ser Arg Phe Val Val Ser Leu Ala Tyr Ala Tyr Glu Thr 210 215 220
- Lys Asp Ala Leu Cys Leu Val Leu Thr Ile Met Asn Gly Gly Asp Leu 225 230 235 240
- Lys Phe His Ile Tyr Asn Leu Gly Asn Pro Gly Phe Asp Glu Gln Arg 245 250 255
- Ala Val Phe Tyr Ala Ala Glu Leu Cys Cys Gly Leu Glu Asp Leu Gln 260 265 270
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- Met Ala Pro Glu Val Val Asn Asn Glu Lys Tyr Thr Phe Ser Pro Asp 325 330 335
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- Leu Gly Cys Arg Gly Glu Gly Ala Ala Gly Val Lys Gln His Pro Val 405 410 415
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- Pro Phe Cys Pro Asp Pro His Ala Val Tyr Cys Lys Asp Val Leu Asp 435 440 445
- Ile Glu Gln Phe Ser Ala Val Lys Gly Ile Tyr Leu Asp Thr Ala Asp 450 . 455 460

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Ile Glu Lys Asp Tyr Ser Ser Leu Cys Asp Lys Gln Pro Ile Gly Arg
50 55 60

Arg Leu Phe Arg Gln Phe Cys Asp Thr Lys Pro Thr Leu Lys Arg His 65 70 75 80

Ile Glu Phe Leu Asp Ala Val Ala Glu Tyr Glu Val Ala Asp Asp Glu
85 90 95

Asp Arg Ser Asp Cys Gly Leu Ser Ile Leu Asp Arg Phe Phe Asn Asp 100 105 110

Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu 115 120 125

Cys Arg Leu Gly Leu Lys Glu Glu Asn Pro Ser Lys Lys Ala Phe Glu 130 · 135 140

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Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp 165 170 175

Leu Glu Arg Gln Pro Val Thr Lys Asn Thr Phe Arg His Tyr Arg Val

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Thr Gly Lys Met Tyr Ala Cys Lys Leu Gln Lys Lys Arg Ile Lys 210 215 220

Lys Arg Lys Gly Glu Ala Met Ala Leu Asn Glu Lys Arg Ile Leu Glu 225 230 235 240

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Lys Phe His Ile Tyr Asn Leu Gly Asn Pro Gly Phe Asp Glu Gln Arg 275 280 285

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- Lys Leu Ala Ala Pro Leu Pro Glu Ile Pro Pro Asp Val Val Thr Glu 85 90 95
- Cys Arg Leu Gly Leu Lys Glu Glu Asn Pro Ser Lys Lys Ala Phe Glu
 100 105 110
- Glu Cys Thr Arg Val Ala His Asn Tyr Leu Arg Gly Glu Pro Phe Glu 115 120 125
- Glu Tyr Gln Glu Ser Ser Tyr Phe Ser Gln Phe Leu Gln Trp Lys Trp 130 135 140
- Leu Glu Arg Gln Pro Val Thr Lys Asn Thr Phe Arg His Tyr Arg Val 145 150 155 160
- Leu Gly Lys Gly Gly Phe Gly Glu Val Cys Ala Cys Gln Val Arg Ala 165 170 175
- Thr Gly Lys Met Tyr Ala Cys Lys Leu Gln Lys Lys Arg Ile Lys 180 185 190
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Ile Pro Glu Gly Gln Arg Val Arg Gly Arg Val Gly Thr Val Gly Tyr 305 310 315 320

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Pro Phe Lys Lys Tyr Lys Glu Lys Val Lys Trp Glu Glu Val Asp Gln 355 360 365

Arg Ile Lys Asn Asp Thr Glu Glu Tyr Ser Glu Lys Phe Ser Glu Asp 370 375 380

Ala Lys Ser Ile Cys Arg Met Pro His Ala Val Tyr Cys Lys Asp Val 385 390 395 400

Leu Asp Ile Glu Gln Phe Ser Ala Val Lys Gly Ile Tyr Leu Asp Thr 405 410 415

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